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- ★ 25 year system warranty
- X Sequentially metre marked
- X Bend insensitive core construction
- X Internal and external grade
- X Euroclass: B2ca-s1a,d0,a1

Product Overview

Enbeam OM5 Multimode loose tube optical fibre cable has been designed specifically for internal and external applications, and supports 40, 100 and 400 Gigabit Ethernet channel distances of 440 metres for 40 Gigabit, 350 metres for 100 Gigabit and 150 metres for 400 Gigabit applications.

The cable construction consists of up to 24 colour coded 250 µm 50/125 µm fibres held within a gel filled central tube.

The cable legend includes the Euroclass information as standard for clear classification and traceability on CPR.

Product Specifications

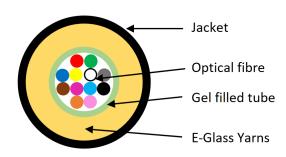
Feature	Values
Number of Cores	12
Type of tube	Loose tube
Fibre type	Multi mode 50/125
Category	OM5
Rodent resistant	yes
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Green
Flame retardant according to IEC 60332-1-2	yes
Low smoke (acc. IEC 61034-2)	yes
Reaction-to-fire class according to EN 13501-6	B2ca
Smoke development class according to EN 13501-6	sla

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Euro class flaming droplets/particles according to EN 13501-6	d0
Euro class acidity according to EN 13501-6	al
Outer diameter approx.	6 mm

Cross-section diagram



Colour coding (as per TIA-598-C)



For fibre core counts above 12 the colour sequence is repeated with the addition of a mark every 70mm for cores 13-24 and two marks for 25-36 and so on.

Cable specifications

Features	Values
Strength members	E-glass yarns
Tensile Strength (during installation/installed)	1000 N / 300 N
Impact	1]
Crush resistance (during installation/installed)	1000 N / 300 N
Torsion	5 cycles +/- 1 turn
Kink	100 mm min.
Temperature range (during installation/installed)	-30 ° to +60 °C

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Temperature range (storage)	-40 ° to +60 °C
Weight (4-16 cores)	Approx. 40 kg/km
Weight (24 cores)	Approx. 45 kg/km
Tube diameter (4-16 cores)	$2.8 \text{mm} \pm 0.1 \text{mm}$
Tube diameter (24 cores)	$3.5 \text{ mm} \pm 0.20 \text{ mm}$
Maximum bend radius (during installation/installed)	20x cable OD/10x cable OD
Sheath thickness	Typical 1.1 mm
Water Penetration	No water on free end

Fibre specifications

Features	Values
Core diameter	50.0 +/- 2.5 μm
Cladding diameter	125.0 +/- 0.8 μm
Primary Coating diameter	245 +/- 7 μm
Max. attenuation at 850 nm	1.0dB/km
Max. attenuation at 953 nm	1.7dB/km
Max attenuation at 1300 nm	1.0dB/km
Refractive Index at 850 nm	1.482
Refractive Index at 1300 nm	1.477
Numerical aperture	0.200 +/- 0.015
Bandwidth at 850 nm	3500 MHz/km
Bandwidth at 952 nm	1850 MHz/km
Bandwidth at 1300 nm	500 MHz/km

Standards

Applicable standard	Subject
IEC 60794-2-20:2013	Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables
IEC 60332-1-2:2004	Tests on electric and optical fibre cables under fire conditions. Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame

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IEC 60754-2:2011	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2:2005+A1:2013	Measurement of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements
IEC 60793-1-1:2022	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance
IEC 60793-2-10:2017	Sectional specification for A1 multimode fibres
IEC 60793-1-20:2014	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry
IEC 60793-1-21:2001	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry
IEC 60793-1-22:2001	Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement
IEC 60793-1-30:2010	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test
IEC 60793-1-41:2010	Optical fibres - Part 1-41: Measurement methods and test procedures – Bandwidth
ITU G.651.1	Characteristics of a 50/125 μm multimode graded index optical fibre cable for the optical access network
EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50575: 2014 + A1: 2016	Power, control and communication cables — Cables for general applications in construction works subject to reaction to fire requirements
EN 50399:2011+A1:2016	Common test methods for cables under fire conditions. Heat release and smoke production measurement on cables during flame spread test. Test apparatus, procedures, results
ISO/IEC 11801-1:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
ANSI/TIA 568-3.D	Optical Fiber Cabling and Components Standard
Ansi/Tia/eia 598-d	Optical Fibre Cable Colour Coding
RoHS-II/-III (2011/65/EU & 2015/863): 2023	Our products, demonstrate full adherence to the regulatory stipulations of the EU Directive 2011/65/EU (RoHS-II) and its corresponding delegated directive 2015/863 (RoHS-III).
WFD: 2023	Compliant to Waste Framework Directive
SCIP: 2023	Compliant - Does Not Contain Substances of Concern In articles as such or in complex objects (Products)

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POPs (EU) No 2019/1021

EU Regulation for the restriction of Persistent Organic Pollutants.

Part Number Table

Part Number	Description
294-712	Excel Enbeam OM5 Multimode Fibre Optic Cable Loose Tube 12 Core 50/125 B2ca Lime Green

Excel is a world class premium performing end to end infrastructure solution designed, Manufactured, supported and delivered without compromise.



Contact us at sales@excel-networking.com

E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.